

Orobanche fasciculata Nutt., CLUSTERED BROOMRAPE. Perennial herb, nonphotosynthetic root parasite (holophyte lacking chlorophyll), fleshy, branched belowground, with 1–several subterranean stems, erect, in range 8–20 cm tall; shoots densely glandular-pilose, the hairs colorless with yellowish amber heads. **Stems:** cylindric, < 5 mm diameter, fleshy, brownish on subterranean portion, reddish on aerial portion. **Leaves:** absent. **Inflorescence:** raceme, appearing scapose, 5–15+-flowered, flowers helically alternate, bracteate; bractlet subtending pedicel, simple, sessile, achlorophyllous, appressed, scalelike, 1.5–12 mm long, partially sheathing rachis, typically purplish, entire or with several short teeth on margins, conspicuously glandular-hairy; pedicel erect, cylindric, in range to 120 mm long, to 1.8 mm basal diameter, reddish to flesh-colored, glandular-hairy, without bracteoles, hollow. **Flower:** bisexual, bilateral, 12–17 mm across; receptacle conic, \pm 2 mm long; **calyx** 5-lobed, slightly bilateral with lower 2 lobes slightly longer and with a deeper sinus between them, in range 8–10 mm long, glandular-hairy; tube cup-shaped, $2.5\text{--}5 \times 4.5\text{--}5.5$ mm, yellowish or flesh-colored; lobes long-tapered awl-shaped, 4.8–6.5 mm long, in range typically > tube, purple, at anthesis with tips generally spreading, venation obscure; **corolla** 2-lipped, to 34 mm long; tube + throat $18\text{--}30 \times \pm 5$ mm but narrower above ovary, light yellow with rose reddish to purplish or dark yellow veins, slightly arched outward, slightly compressed side-to-side most of length but circular to compressed top-to-bottom at orifice, internally longitudinally 2-ridged on lower side by inward folds of the tube, the ridges prominent, \pm 1 mm tall, extending length of throat from above stamens to mouth of throat, pubescent; lips defined by sinuses 6–10 mm deep, yellow, hairy on faces, ciliate on margins; upper lip 2-lobed, lobes erect to spreading, narrowly oblong to tongue-shaped, 3–4 mm wide, all similar in size; lobes 3-veined at base; **stamens** 4, lacking staminode, fused to corolla at base of throat, 2 on lower side and 2 on upper side, on upper side stamens attached about 0.5 higher than on lower side; filaments 8–10 mm long, of lower stamens to 2 mm > upper stamens; anthers dithecal, \pm 1.7 mm long and wide, pale yellow, each sac obovoid with short tail at base, villous-tomentose, longitudinally dehiscent; pollen pale yellow; **pistil** 1, 20–23 mm long; ovary superior, ellipsoid, $6\text{--}7 \times 3.5\text{--}4.2$ mm, slightly compressed side-to-side, glabrous, 1-chambered with 4 placentae and numerous ovules (parietal); style glabrous, 12–14 mm long, white or pale yellowish green except reddish at tip; stigma 2-lipped and sometimes funnel-shaped, each lobes deltate to roundish, $1.2\text{--}2 \times 2.2\text{--}3$ mm, dentate on margin, dentate to short-acuminate at tip, papillate on surface. **Fruit:** capsule, loculicidal, 2(weakly 4)-valved, many-seeded, ovoid-ellipsoid, $6.5\text{--}7 \times 3.8\text{--}4.2$ mm, slightly compressed \perp septum, light brown, enclosed by persistent calyx; calyx purplish in developing fruit aging brown, with 5 conspicuous, low ribs alternating with lesser ones on expanded tube, lobes erect, to 4 mm long. **Seed:** subspheroid to irregular, $0.3 \times 0.2\text{--}0.3$ mm, dark brown, netlike. Mid-April–May.

Native. Parasitic perennial herb rarely found in range, growing in coastal sage scrub on roots of the shrubs *Artemisia californica*, *Eriogonum fasciculatum*, and *Eriodictyon crassifolium*, but nobody knows its habitats because so seldom found. *Orobanche fasciculata* is the easiest broom-rape in range to recognize, because it is reddish with yellow flowers, often visible against a drab background; but this plant can also be purplish and have essentially purple flowers. Seeds are minute.

B. A. Prigge & A. C. Gibson